AUDIO FEEDBACK TEST

Abstract

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Methods and systems provide automated testing of computer facilitated audio input and output devices. A tone is converted from a digital to analog signal and is sent to a sound mixing device. At the sound mixing device, the analog tone is looped back through a recording line to an analog to digital converter. The recorded tone is

10 converted from a time domain to a frequency domain using a Fast Fourier Transform (FFT) analysis. The frequency, and if desired, the intensity of the recorded tone is compared against the known frequency, and at the desired intensity of the played tone. If the recorded tone is the same as the played tone, the ability of the sound card to play the tone is designated as passing. The FFT analysis results also may be utilized to

15 calculate a signal to noise ratio (SNR), a total harmonic distortion (THD) value, a total harmonic distortion plus noise (THD+N) and a DC-offset value. Each of these calculated values may be compared against pass/fail thresholds for the played tone.